In the Claims:

The following is the clean version of all pending claims of the present application under 37 C.F.R. 1.121(c)(3) and preprinted here for the convenience of the Examiner.

1. Method for the manufacture of essentially endless fine threads from meltable polymers, in which polymer melt is spun from at least one spin hole and passed through a Laval nozzle, wherein the spun thread is drawn by gas streams accelerated to high speed by means of the Laval nozzle, and wherein with a given geometry of the melt hole and its position relative to the Laval nozzle the temperature of the polymer melt, its throughput per spin hole and the pressures in front of and behind the Laval nozzle which define the speed of the gas streams are controlled in such a way that the thread before solidification thereof attains a hydrostatic pressure in its interior which is greater than the gas pressure surrounding it, such that the thread bursts and splits into a plurality of fine threads.

2. (AMENDED) Method according to claim 1, wherein the gas flow around the at least one thread is laminar.

3. (AMENDED) Method according to claim 1, wherein the space behind the Laval nozzle is at ambient pressure or, in case of further processing of the threads, is at a pressure slightly above ambient pressure, which is necessary for further processing.

4. (AMENDED) Method according to claim 1, wherein the gas streams which draw the thread are at ambient temperature or a temperature caused by their supply.

5. (AMENDED) Method according to claim 1, wherein the ratio of the pressures in the space above and below the Laval nozzle when using air is selected between 1.02 and 2.5, depending on the polymer, its throughput and melting temperature.

6. (AMENDED) Method according to claim 1, wherein the thread emerging from the spin hole is heated by radiation in the region of the Laval nozzle.

7. (AMENDED) Method according to claim 1, wherein a plurality of threads are spun and split, which are deposited to form a non-woven fabric of further processed into yarns.

8. (AMENDED) Apparatus with a spinning head connected to a feeder for the melt, a spinning nozzle assembly which is held in the spinning head and comprises at least one spin hole and which spins a melt monofilament, a plate (6') which is located below the spinning head (11) and which comprises a Laval nozzle (6) arranged in a fixed geometrical relationship to the spin hole (4), wherein between plate (6') and spinning head (11) is formed a closed first space (8) provided with a supply of gas (5) and below the plate (6') is provided a second space (7), and wherein the throughput of the melt per spin hole (4), the temperature of the melt and the pressure in the first and second spaces are adjusted in such a way that the spun melt monofilament carried by the flow of gas after leaving the Laval nozzle (6) before solidification thereof attains a hydrostatic pressure which is greater than the gas pressure surrounding it, such that the thread bursts and splits into a plurality of fine threads.

9. (AMENDED) Apparatus according to claim 8, wherein the spinning assembly (3) is insulated from the first space (8) in the region of the at least one spin hole (4) by an insulating assembly (9) and/or is heated in the region of the at least one spin hole (4).

10. (AMENDED) Apparatus according to claim 8 wherein the pressure ratios in the first and second spaces (8, 7) are adjusted in such a way that the gas flow in the Laval nozzle (6) attains speeds up to the speed of sound and over.

11. (AMENDED) Apparatus according to claim 8, wherein the second space (7) is at ambient pressure or a few mbar over.

12. (AMENDED) Apparatus according to claim 8, wherein the supplied gas is at ambient temperature or the temperature of its feeder.

13. (AMENDED) Apparatus according to claim 8, wherein the outlet opening of the at least one spin hole (4) in the region of the Laval nozzle (6) is located at the level of the upper edge of the plate (6'), a few mm above the upper edge of the plate, or extends a few mm into the Laval nozzle (6).

14. (AMENDED) Apparatus according to claim 8, wherein the spinning nozzle assembly comprises a plurality of spin holes (4) which are if occasion arises provided with nipples and which form a row or several parallel rows.

15. (AMENDED) Apparatus according to claim 8, wherein the plate comprises at least one elongate Laval nozzle.

16. (AMENDED) Apparatus according to claim 8, wherein the plate comprises a plurality of rotationally symmetrical Laval nozzles.

17. (AMENDED) Apparatus according to claim 8, wherein a delivery belt is provided for deposition of the threads and formation of a non-woven fabric.

18. (AMENDED) Apparatus according to claim 8, wherein a winding device is provided for winding the threads.

19. (AMENDED) Non-woven fabric made from threads manufactured from meltable polymers, in which polymer melt is spun from at least one spin hole and passed through a Laval nozzle, wherein the spun thread is drawn by gas streams accelerated to high speed by means of the Laval nozzle, and wherein with a given geometry of the melt hole and its position relative to the Laval nozzle the temperature of the polymer melt, its throughput per spin hole and the pressures in front of and behind the Laval nozzle which define the speed of the gas streams are controlled in such a way that the thread before solidification thereof attains a hydrostatic pressure in its interior which is greater than the gas pressure surrounding it, such that the thread bursts and splits into a plurality of fine threads.

20. (AMENDED) Yarns made from threads which have been produced from meltable polymers, in which polymer melt is spun from at least one spin hole and passed through a Laval nozzle, wherein the spun thread is drawn by gas streams accelerated to high speed by means of the Laval nozzle, and wherein with a given geometry of the melt hole and its position relative to the Laval nozzle the temperature of the polymer melt, its throughput per spin hole and the pressures in front of and behind the Laval nozzle which define the speed of the gas streams are controlled in such a way that the thread before solidification thereof attains a hydrostatic pressure in its interior which is greater than the gas pressure surrounding it, such that the thread bursts and splits into a plurality of fine threads.